

INTERNATIONAL SEARCH REPORT

Intern~~ation~~ Application No

PCT/JP 03/10044 ✓

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H05K13/08 H05K13/04 ✓

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H05K ✓

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ ✓

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A ✓	US 4 745 295 A (SENO ET AL.) ✓ 17 May 1988 (1988-05-17) the whole document	1,2,7, 13,23 ✓
A ✓	US 5 764 874 A (WHITE) ✓ 9 June 1998 (1998-06-09) the whole document	1,7,13, ✓ 23
A ✓	US 6 385 507 B1 (BUIJTELS) ✓ 7 May 2002 (2002-05-07) the whole document	1 ✓
A ✓	JP 10 163690 A (TENRYU TECHNIC KK) ✓ 19 June 1998 (1998-06-19) abstract	1 ✓

☐ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

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"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

28 November 2003 ✓

Date of mailing of the international search report

10/12/2003 ✓

Name and mailing address of the ISA

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INTERNATIONAL SEARCH REPORT

Information on patent family members

Inter-Application No

PCT/JP 03/10044 ✓

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 4745295 ✓	A ✓	17-05-1988 ✓ JP	1685919 C ✓
		JP	3045919 B ✓
		JP	61289692 A ✓
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		EP	1108208 A1 ✓
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			04-01-2001 ✓
			20-06-2001 ✓
			28-01-2003 ✓
JP 10163690 ✓	A ✓	19-06-1998 ✓	NONE ✓